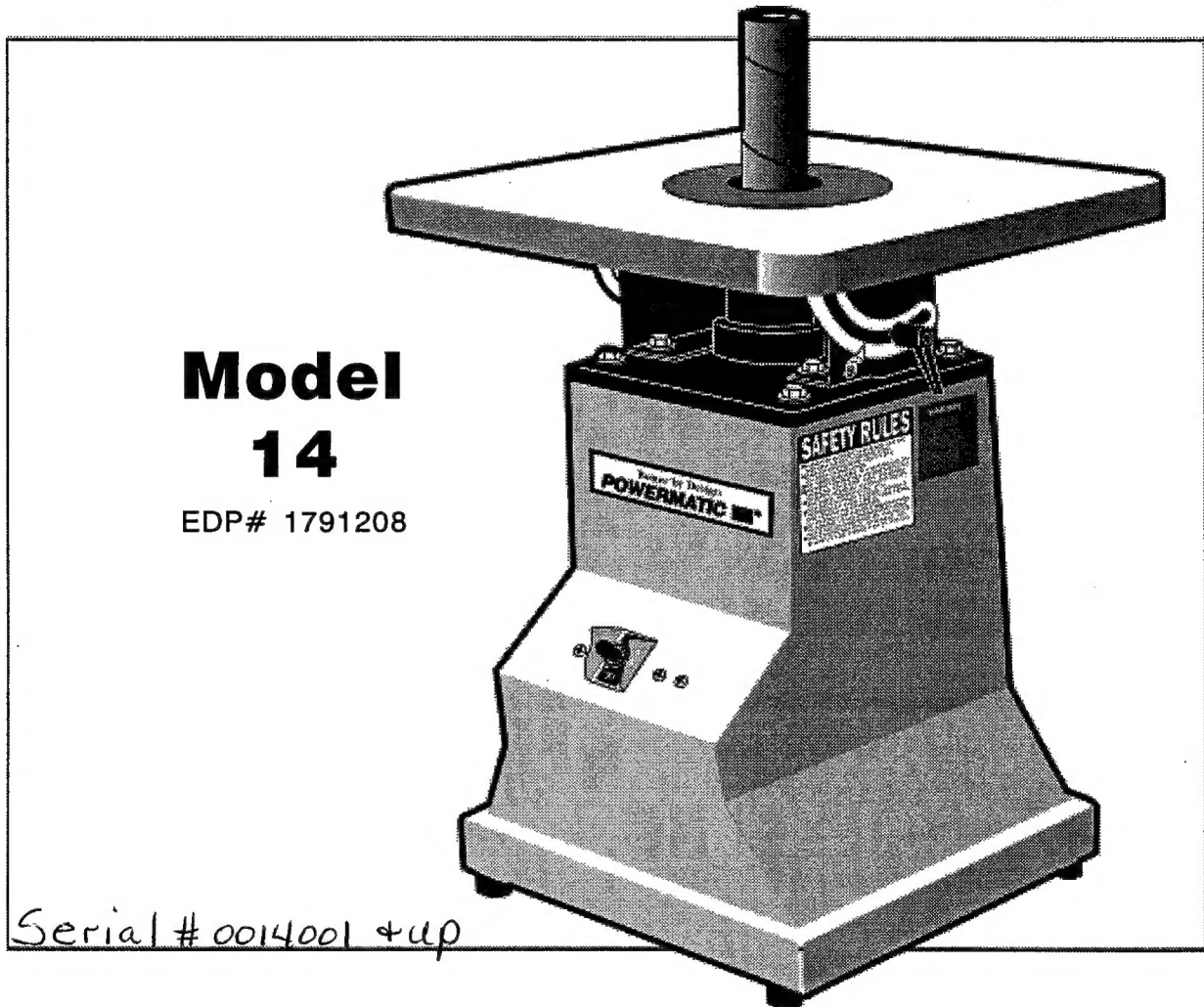


INSTRUCTION MANUAL

Oscillating **SANDER**



Better By Design™

POWERMATIC®
CORPORATION

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(931) 473-5551

FOREWORD

This manual has been prepared for the owner and those responsible for the operation of a Powermatic Model 14 Oscillating Sander.

Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Read the safety and maintenance instructions thoroughly before operating or servicing the machine.

In order to obtain maximum life and efficiency from your Powermatic table saw, and to aid in operating and maintaining the machine with safety, read this manual thoroughly and follow all instructions carefully.

The specifications put forth in this manual were in effect at the time of publication. However, owing to Powermatic's policy of continuous improvement, changes to these specifications may be made at any time without obligation on the part of Powermatic.

The information and recommendations contained in the publication come from sources believed to be reliable and to represent the best current practice. Powermatic does not intend this manual to be a complete course of instruction on how to use this machine with safety and does not guarantee or represent that the information is absolutely correct or sufficient. In addition, it cannot be assumed that all acceptable safety measures are listed or that other additional measures are not needed under particular or exceptional circumstances or conditions.

POWERMATIC WARRANTY

Powermatic Corporation, 619 Morrison Street, McMinnville, Tennessee 37110

Powermatic will repair or replace, at its expense and at its option, any Powermatic machine, machine part or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to the Authorized Powermatic Distributor from which the machine was purchased within two years and provides Powermatic with reasonable opportunity to verify the alleged defect by inspection. Powermatic will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by any one other than an authorized Powermatic service representative. Under no circumstances will Powermatic be liable for incidental or consequential damages resulting from defective products. This warranty is Powermatic's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products, all other warranties expressed or implied whether of merchantability, fitness for purpose or otherwise are expressly disclaimed by Powermatic.

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SPECIFICATIONS

Table size	14-1/2" x 14-1/2"
Table material	cast iron
Height (base to top of table)	18-1/2"
Motor	1/2HP, single phase, 115V
Table tilt	0 to 45 degrees
Oscillation	1"
Oscillations per minute	74
Spindle length	5-7/8"
Weight	77 lbs.
Cube	16-7/8" x 16-7/8" x 20-1/2"

SAFETY RULES

READ THE MANUAL: Read, understand and follow the safety and operating instructions found in this manual. Know the limitations and hazards associated with the Model 14 oscillating vertical spindle sander.

WORK AREA: Keep the area around the machine clean and free of scrap material, saw dust, oil and/or grease to minimize the danger of slipping. Powermatic recommends the use of anti-skid strips for the operator's position. Mark off the machine area and make sure it is well lighted and equipped with a proper exhaust system to minimize dust.

ELECTRICAL: Your machine must be electrically grounded. If a cord and plug are used, make sure the the grounding lug connects to a suitable ground. Follow the grounding procedure indicated by the National Electrical Code. Keep the machine in a dry area free from moisture.

PROTECTION: Take every precaution to protect yourself, others around you, and the machine itself from improper use.

CARELESS ACTS: Give the work you are performing your undivided attention. Horseplay, looking around, and talking to someone are careless acts that can result in serious injury.

CONTROL: Maintain a balanced stance and keep your body under control at all times. Do not overreach or use excessive force to perform any machine operation.

EYES: Always wear approved safety goggles, glasses, or a face shield when operating the sander. There are no exceptions to this rule.

CLOTHING: Do not wear loose fitting clothing, neckties, jewelry, or gloves that can get caught in moving parts. Confine long hair and keep sleeves above the elbow.

HOUSEKEEPING: Before turning the machine on, be sure that the table surface has been cleared of all items other than the workpiece to be sanded. Keep the area around the machine clean and free of saw dust to minimize the danger of slipping.

POWER ON: Before connecting power to the sander make sure the start switch is in the "OFF" position.

POWER OFF: Make sure the sander is unplugged or electrically disconnected and locked out before performing maintenance, changing spindles, or completion of any type service work.

LIMITATIONS: Read, understand, and follow the safety instructions found in this manual. Know what

the Model 14 oscillating spindle sander can and cannot safely do. A safety rule decal has been placed on the machine as a reminder of good safety practice.

HAND SAFETY: Keep fingers and hands away from the spindle while in operation. Avoid getting fingers too close to the drum. Never wear gloves while operating the sander.

CLEAN-UP: If being used, always check the dust collector before sanding. Thoroughly clean out any wood chips found in the exhaust chute before proceeding. Sanding metal with wood chips and saw dust in the dust collector can be dangerous, leading to sparks which could cause a fire in your dust collector.

SPINDLE CHANGE: Never attempt to change the spindle drum or the table insert while the machine is operating. Turn the machine off and disconnect the power source before making these changes.

GUARDS: Keep machine guards in place at all times when sander is in use. If any guard is removed for maintenance purposes, use extreme caution and replace upon completion of maintenance before operating the sander.

SPINDLE DRUM SANDER: Be sure the spindle drum is in good condition with no tears or holes before operating the sander. A worn or torn drum can catch and throw a workpiece and cause injury.

OPERATOR POSITION: When operating the sander, it is recommended the operator face the machine from the front. This allows the operator ease of access to the ON/OFF switch.

TABLE SAFETY: Be sure the table is firmly locked in position before placing stock on it.

JOB COMPLETION: If you must leave the machine area for any reason when operating the sander, you should turn it off and wait until the machine comes to a complete stop before leaving. If the operation is complete, you should also clean up sander and work area. Never clean the sander with the power on, and never use your hands to clear saw dust and debris - always use a brush.

SECURE STOCK: Hold the workpiece firmly against the table surface to resist both the rotation and oscillation of the spindle.

WORKPIECE SUPPORT: Never sand stock freehand. Always use the table and hold the stock down flat on the table when making contact with the sanding spindle.

RING SHAPED STOCK: Do not attempt to place ring shaped stock over the spindle with the machine running. Stop the machine, place the ring over the spindle, turn the machine on, complete the sanding operation, turn the machine off, then remove the ring. Do not attempt to sand ring shaped stock freehand, use the table.

RECEIVING THE SANDER

Remove the sander from its carton. Check for damage and insure all parts are intact. Any damage should be reported to your distributor and shipping agent immediately upon discovery. Before proceeding with assembly, read the manual thoroughly, familiarize yourself with correct assembly and maintenance procedures and proper safety precautions.

In addition to the preassembled sander, the following parts should be included in carton:

- 3 wrenches
- 1 screw
- 1 straight clamp
- 1 upper follower plate
- 2 oblong insert plates
- 2 round insert plates (one is already placed on machine)
- 3 spindles
- 2 drums
- 5 sanding sleeves

ASSEMBLY

Your Powermatic oscillating vertical spindle sander is shipped preassembled and ready for operation. Before operating be sure all screws are tight, the table is properly adjusted, and the proper size spindle is installed on the machine. Be sure to read the manual and all safety instructions thoroughly before attempting to operate the sander. Periodic or regular inspections are necessary to insure your sander is properly adjusted. This will add to the useful life of the machine and insure your continued satisfaction with its performance.

OPERATING PROCEDURES

The purpose of the oscillating vertical spindle sander is primarily to sand the interior curved surfaces of wood, plastic, or metal workpieces.

1. Select a spindle smaller than the curve to be sanded.
2. Always use an insert plate. Four plates are included with the machine: 2" oblong, 2" round, 5/8" oblong, and 5/8" round. The oblong plates are used when the table is tilted for bevel sanding. Each plate has a notch on the outer edge to ensure that it is inserted properly.

3. Make sure the spindle is correctly seated in the threaded sleeve on the sander. **CAUTION:** Do not over tighten the spindle as it may be difficult to remove after the sanding operation.

4. When the table is set at 90 degrees, sanding may be done at any location on the table around the spindle.

5. If the table is set at any angle other than 90 degrees the only area on the table surface where the set angle is actually achieved is the front center line of the table and the front of the spindle. To hold this angle, it is recommended that sanding be done only in this location (**Figure 1**).

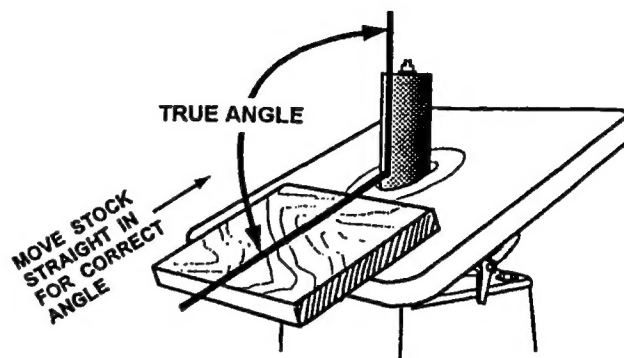


FIGURE 1

6. When sanding small or thin pieces of material a backing board should be used. A backing board is made by using a piece of wood cut to the width of the table (**Figure 2**). Push the board into the spindle until a half circle is formed. This board should then be clamped to the table and the small workpiece can be easily sanded.

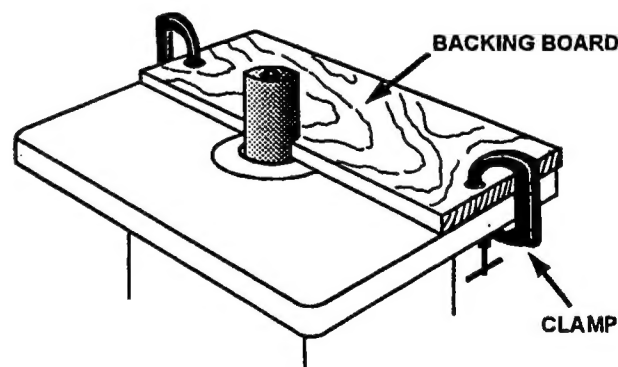


FIGURE 2

7. Your oscillating vertical spindle sander comes with three spindles (1/4", 1/2" and 5/8"), two rubber drums (1-1/2" and 2") and sanding sleeves that can be used for any number of operations. When not in use, the spindles should be properly stored.

MAINTENANCE INSTRUCTIONS

1. Keep the machine and all attachments clean.
2. Protect the spindle sleeves from nicks and defects. Clean the sleeves and store them properly to prevent damage.
3. Apply a small amount of grease to the table tilting screw as necessary.
4. All bearings are sealed and require no further maintenance.
5. Before inserting the threaded spindle into the threaded shaft, be sure the surfaces are clean. Do not over tighten as it may be difficult to remove the spindle after operation.
6. After completion of a project, clean the machine and the area around it. Return the table to 90 degrees. As necessary, clean the table surface and protect it with talc powder or a polishing compound.

TYPES OF SPINDLES

The oscillating spindle sander uses the following equipment:

- 1/4" spindle and sanding sleeve.
- 1/2" spindle and sanding sleeve.
- 5/8" spindle and sanding sleeve.
- 1-1/2" sanding sleeve and rubber drum.
- 2" sanding sleeve and rubber drum.
- 3" sanding sleeve and rubber drum (optional).

Note that the 5/8" sleeve, 1-1/2" drum, 2" drum, and optional 3" drum **all use the 5/8" spindle**. (When shipped, the 5/8" spindle is attached to the 2" drum.)

CHANGING DRUMS ON THE 5/8" SPINDLE

Tools needed:

- 5/16" wrench (provided)
- screwdriver

1. To remove rubber drum from the 5/8" spindle, unscrew and remove the nut, washer and follower plate at top of spindle as shown in **Figure 3**. (NOTE: Nuts have a left-hand thread; turn *clockwise* to loosen.) Remove the drum by sliding upward.
2. When the 1-1/2", 2" or 3" drum is required, slide the desired drum on to the spindle. Make sure the key is inserted into the side of the spindle. Place the follower plate, washer and nut at the top and retighten.
3. To mount the 5/8" sleeve on to its spindle, remove the key and the lower follower plate from spindle and slide the sleeve onto the spindle. At base of spindle, attach the straight clamp with the roundhead screw and tighten.

Should any of the smaller sleeves become loose, simply retighten the clamp.

All spindles are the same thread size at the base. The matching tapers on the spindle and sander hold each

spindle in line, while the threaded base locks the spindle down.

CHANGING SPINDLES

Tools needed:

- 2 open end wrenches (provided)

Holding the wrenches as shown in **Figure 4**, keep one wrench steady on the lower nut, and loosen top nut with other wrench (NOTE: Nuts have left-hand thread; turn *clockwise* to loosen). Remove the spindle and store in a safe, clean area. Attach the new spindle and secure with nuts. **DO NOT OVERTIGHTEN.**

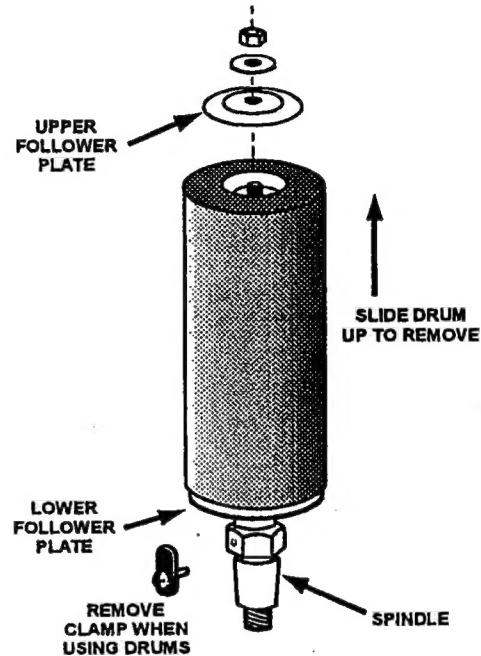


FIGURE 3

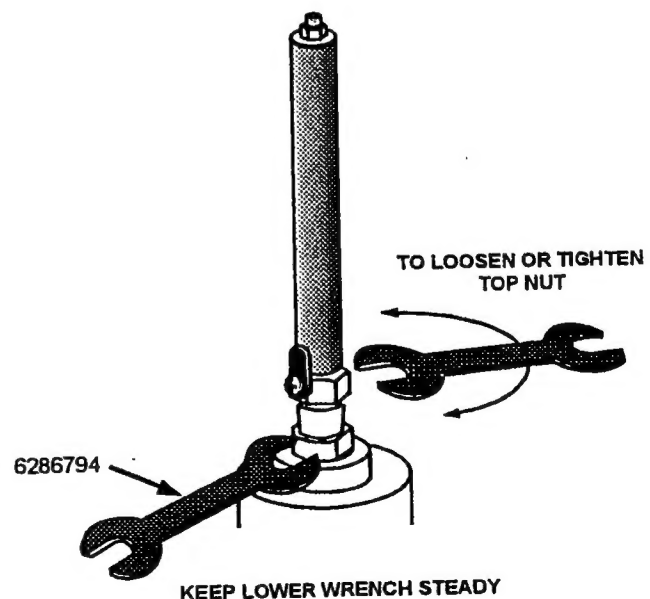
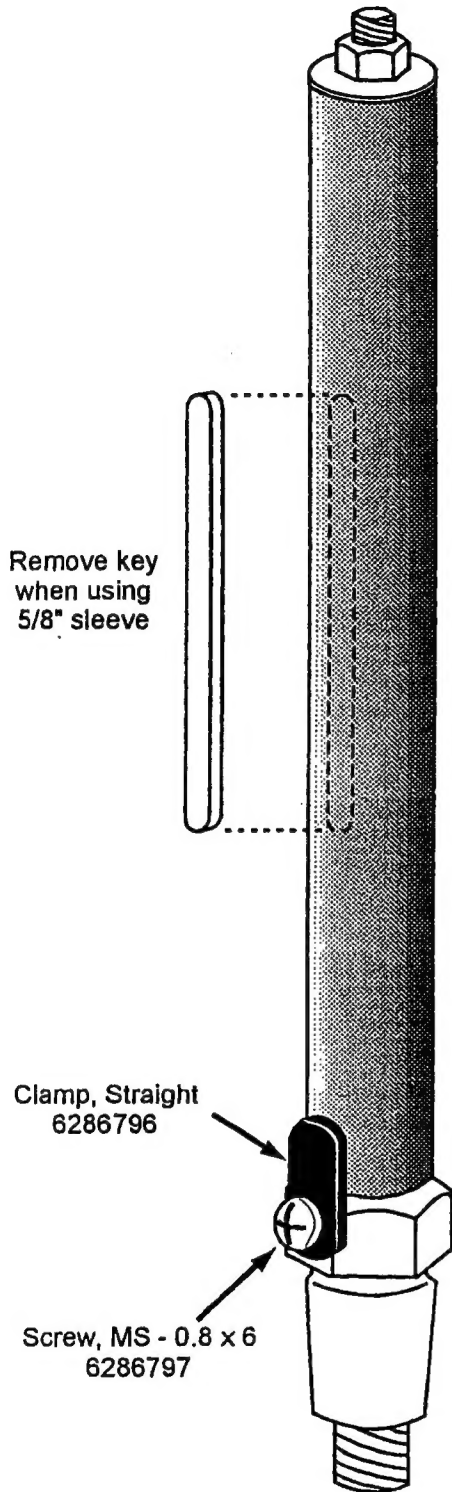
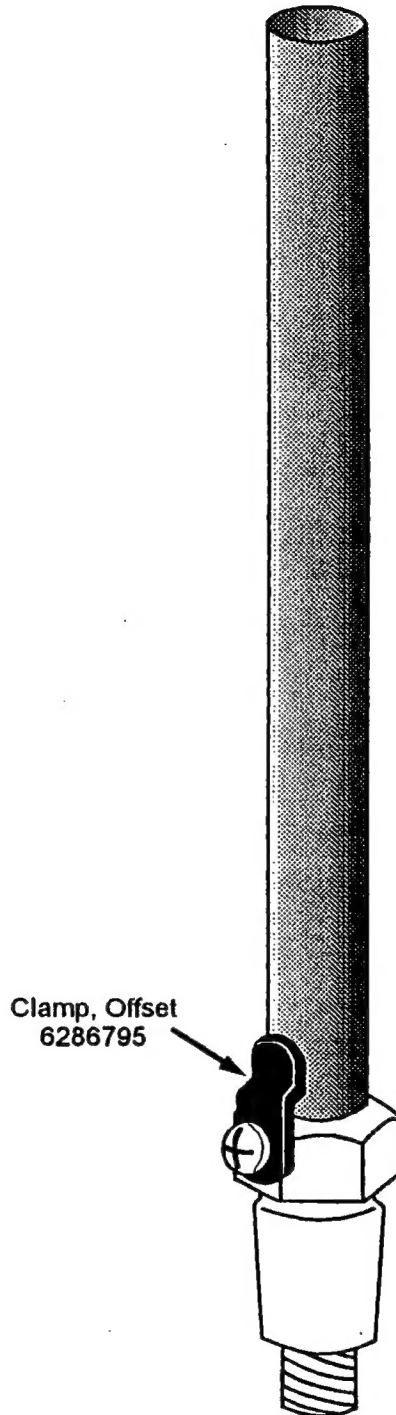


FIGURE 4

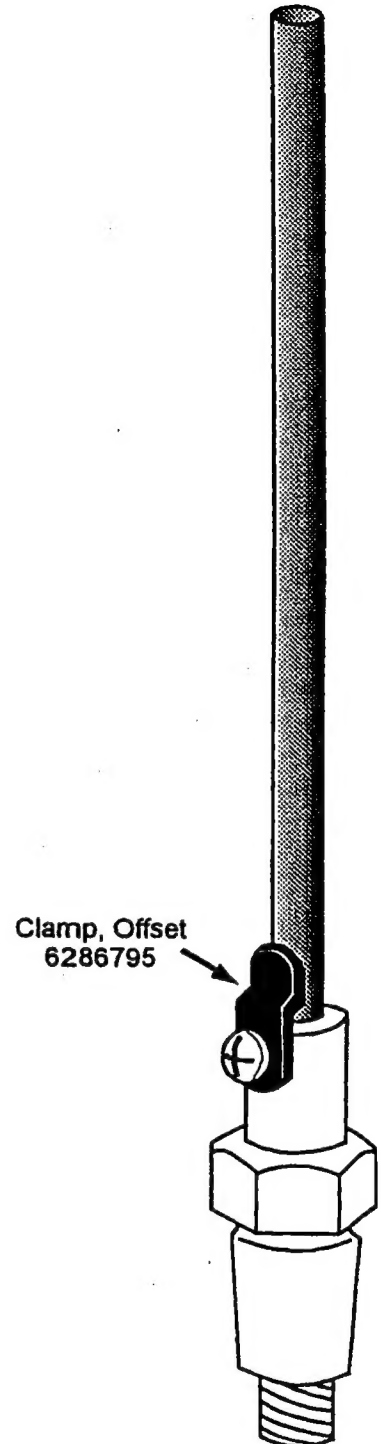
SPINDLE CONFIGURATION ACTUAL SIZE



5/8"
Diam. Shaft
PART NO. 6286895

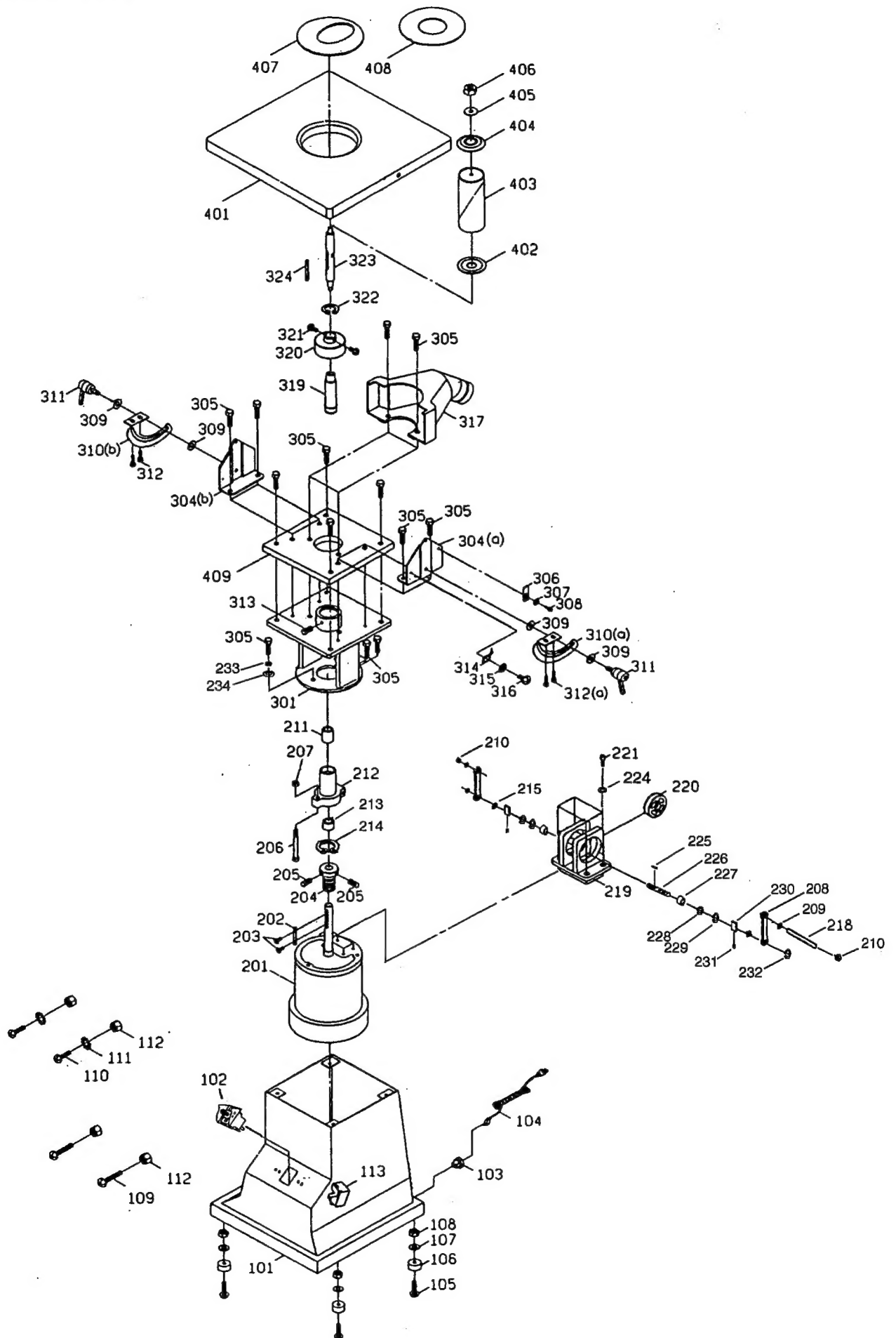


1/2"
Diam. Shaft
PART NO. 6286897



1/4"
Diam. Shaft
PART NO. 6286896

EXPLODED VIEW: Model 14 Spindle Sander



PARTS LIST: Model 14 Spindle Sander

NO.	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
101	6286914	Base	311	6286958	Clamp Handle
102	6286697	Switch	312	6286491	Phillips Pan Hd. Screw
103	6286915	Nylon Clamper	313	6286492	Soc. Set Screw
104	6286916	Power Cord	314	6286961	Width Pointer
105	6286485	Phillips Pan Hd. Screw	315	6286493	Gear Washer
106	6286918	Rubber Feet	316	6286963	Phil. Pan Hd. Screw
107	6286919	Washer 1/4"	317	6286964	Collect Dust Cover
108	6286486	Nut	319	6286894	Main Shaft
109	6286921	Phillips Pan Hd. Screw, 3/16"-24 UNC x 1-1/2"	320	6286967	Cover
110	6286922	Phillips Pan Hd. Screw, 3/16"-24 UNC x 3/4"	321	6286494	Phil. Pan Hd. Screw
111	6286923	Gear, Washer 3/16"	322	6286969	C-Snap Ring
112	6286924	Nut, 3/16"-24 UNC	323A	6286895	Spindle 5/8"
113	6286696	Switch, Protection Box	323B	6286896	Spindle 1/4"
201	6286912	Motor 1/2HP	323C	6286897	Spindle 1/2"
202	6286926	Key	324	6286971	Key 5 x 50
203	6286927	Flat Set Screw	331A	6286903	Drum & sleeve 1-1/2"
204	6286928	Rod	331B	6286904	Drum & sleeve 2"
205	6286487	Soc. Set Screw	331C	6286905	Drum & sleeve 3" (optional)
206	6286930	Transmission Rod	401	6286973	Working Table
207	6286931	Hex. Nut M8 x 1.25	402	6286974	Lower Follower Plate 1-1/2"
208	6286932	Connecting Rod		6286798	Lower Follower Plate 2"
209	6286933	Washer 1/4"		6286892	Lower Follower Plate 3"
210	6286488	Hex. Nut	403	6286975	Driving Wheel
211	6286935	Bearing	404	6286976	Upper Follower Plate 1-1/2"
212	6286470	Transmission		6286799	Upper Follower Plate 2"
213	6286937	Bearing		6286893	Upper Follower Plate 3"
214	6286938	C-Snap Ring	405	6286977	Washer 5/16"
215	6286939	Connection Rod Bushing	406	6286978	Hex. Nut 5/16"-18 UNC
218	6286471	Shaft	407	6286979	Table Insert 2" Obl
219	6286472	Wheel Seat	408	6286980	Table Insert 2" Rd
220	6286473	Wheel		6286981	Table Insert 5/8" Obl
221	6286490	Hex. Soc. Hd. Screw		6286982	Table Insert 5/8" Rd
224	6286474	Washer, Spring 1/4"		6286984	Table Insert 3" Rd (optional)
225	6286475	Key	409	6286891	Dust Cover
226	6286476	Arbor, Wheel	410	6286495	Pin
227	6286477	Bearing 6001ZZ			
228	6286478	Ring, C-Snap			
229	6286479	Ring, C-Snap			
230	6286480	Flange			
231	6286481	Screw, Soc. Set			
232	6286482	Ring, E-Snap			
233	6286483	Washer, Spring 5/16"			
234	6286484	Washer, Flat 5/16" x 18			
301	6286948	Main Casting			
304A	6286949	L-Type Bracket (R)			
304B	6286950	L-Type Bracket (L)			
305	6286951	Hex. Hd. Screw, M8 x 1.25 x 20			
306	6286952	Top Plate			
307	6286953	Washer 1/4"			
308	6286954	Hex. Hd. Screw M6 x 1 x 10			
309	6286955	Washer 1/4"			
310A	6286956	Graduation Dial (R)			
310B	6286957	Graduation Dial (L)			

OPTIONAL

6286995	Sanding Sleeve 1/4"	60 Grit
6286996	Sanding Sleeve 1/2"	60 "
6286985	Sanding Sleeve 5/8"	60 "
6286986	Sanding Sleeve 1-1/2"	60 "
6286987	Sanding Sleeve 2"	60 "
6286988	Sanding Sleeve 3"	60 "
6286906	Sanding Sleeve 1/4"	100 "
6286907	Sanding Sleeve 1/2"	100 "
6286908	Sanding Sleeve 5/8"	100 "
6286909	Sanding Sleeve 1-1/2"	100 "
6286910	Sanding Sleeve 2"	100 "
6286911	Sanding Sleeve 3"	100 "
6286989	Sanding Sleeve 3"	150 "
6286990	Sanding Sleeve 1/4"	150 "
6286991	Sanding Sleeve 1/2"	150 "
6286992	Sanding Sleeve 5/8"	150 "
6286993	Sanding Sleeve 1-1/2"	150 "
6286994	Sanding Sleeve 2"	150 "

Sanding sleeves sold 6 per pack

OPTIONAL ACCESSORIES

6286791*	Spindle assembly 1-1/2"
6286792*	Spindle assembly 2"
6286793*	Spindle assembly 3"
6286900	Spindle assembly 1/4"
6286901	Spindle assembly 1/2"
6286902	Spindle assembly 5/8"
6286905	3" Rubber sanding drum & sleeve
6286984	3" Table insert (for use w/ 3" drum)
6286699	Main shaft 5/8" (set of 2)

*Includes all hardware, drums, 5/8" spindle and sanding sleeves

SANDING SLEEVES (6 per package)

Size	60 Grit	100 Grit	150 Grit
1/4"	6286995	6286906	6286990
1/2"	6286996	6286907	6286991
5/8"	6286985	6286908	6286992
1-1/2"	6286986	6286909	6286993
2"	6286987	6286910	6286994
3"	6286988	6286911	6286989

To order parts or reach our service department, please call our toll free number between 8:00 A.M. and 4:30 P.M. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately. Locating the EDP number of the part(s) required from your parts manual will also expedite your order.

Phone No. : 800-248-0144

Fax No. : 931-473-7819

If you are calling from Canada, please call 800-238-4746



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